WHAT IS CLAIMED IS: Marked-up Claims

1. (Amended) A method for communicating between an application source located on a first side of a firewall and a network element located on a second side of the firewall, comprising the steps of:

providing the application source with an applet to drive a user request, said applet provided by a web server included on the first side of the firewall;

sending said user request to a read/write server provided on the second side of the firewall;

creating a hypertext transfer protocol-data [simple object access protocol (HTTP-SOAP)] (HTTP-data) packet of said user request;

transmitting said [HTTP-SOAP] HTTP-data to [network management application (NMA)] a server provided on the second side of the firewall;

building an appropriate nodal model of said user request in said [NMA] server provided on the second side of the firewall;

sending [SOAP] data encoded requests from said [NMA] server provided on the second side of the firewall to a network element agent (NEA) provided on the second side of the firewall;

parsing said [SOAP] data encoded requests received by said [NMA] server provided on the second side of the firewall in said NEA which encompasses data needed to complete a single nodal transaction;

encoding in said NEA, said [SOAP] data packets;

transmitting said [SOAP] data packets to a translator box associated with the network element, said translator box located on the second side of the firewall;

translating said [SOAP] data packet into the appropriate command for the network element; and

transmitting said command to the network element located on the second side of the firewall.

2. The method in accordance with claim 1, further including the step of providing said web server at a localized location with respect to the application source.

3. (Amended) The method in accordance with claim 1 further including the step of transmitting in a [SOAP] simple object access protocol encoded request a network element configuration data from said [NMA] server provided on the second side of the firewall to a network element discovery network (NED).

4. The method in accordance with claim 3, wherein said network configuration data comprises port, card, slot and shelf information.

5. (Amended) The method in accordance with claim 1, further including the step of modifying said user request prior to sending said request to said [NMA] server provided on the second side of the firewall.

6. The method in accordance with claim 1, further including the step of transmitting said user request to a database for storage.

7. The method in accordance with claim 5, further including the step of transmitting said user request to a database for storage.

8. (Amended) The method in accordance with claim 1 for communicating with a plurality of network elements, further including the steps of:

including a plurality of NEAs, each of said NEAs controlling at least one of the network elements; and

transmitting said [SOAP] data encoded requests to the proper NEA.

9. (Amended) The method in accordance with claim 8, further including the steps of:

including a plurality of translator boxes, each of said translator boxes controlling at least one of the network elements; and

transmitting said [SOAP] data packets to the proper network element.

10. (Amended) The method in accordance with claim 1, further including the step of translating said [SOAP] data packets into an appropriate command in said translator box understood by the network element.

11. (Amended) A method for communicating between an application source located on a first side of a firewall and an application located on a second side of the firewall, comprising the steps of:

providing the application source with an applet to drive a user request, said applet provided by a web server included on the first side of the firewall;

sending said user request to a read/write server provided on the second side of the firewall;

creating a hypertext transfer protocol-data [simple object access protocol (HTTP-SOAP)] HTTP-data packets of said user request;

transmitting said [HTTP-SOAP] HTTP-data packets to [network management application (NMA)] a server provided on the second side of the firewall;

building an appropriate nodal model of said user request in said [NMA] server provided on the second side of the firewall;

sending [SOAP] data encoded requests from said [NMA] server provided on the second side of the firewall to a network element agent (NEA) provided on the second side of the firewall;

parsing said [SOAP] data encoded requests received by said [NMA] server provided on the second side of the firewall in said NEA which encompasses data needed to complete a single nodal transaction;

encoding in said NEA [SOAP] data packets;

transmitting said [SOAP] data packets to a translator box associated with the application, said translator box located on the second side of the firewall;

translating said [SOAP packet] data packets into the appropriate command for the application; and

transmitting said command to the application located on the second side of the firewall.

12. The method in accordance with claim 11, further including the step of providing said web server at a localized location with respect to the application source.

13. (Amended) The method in accordance with claim 11, further including the step of modifying said user request prior to sending said request to said [NMA] server provided on the second side of the firewall.

14. The method in accordance with claim 11, further including the step of transmitting said user request to a database for storage.

15. The method in accordance with claim 13, further including the step of transmitting said user request to a database for storage.

16. (Amended) The method in accordance with claim 11, for communicating with a plurality of applications, further including the steps of:

including a plurality of NEAs, each of said NEAs controlling at least one of the applications; and

transmitting said [SOAP] data encoded requests to the proper NEA.

17. (Amended) The method in accordance with claim 16, further including the steps of:

including a plurality of translator boxes, each of said translator boxes controlling at least one of the applications; and

transmitting said [SOAP] data packets to the proper applications.

18. (Amended) The method in accordance with claim 11, further including the step of translating said [SOAP packet] data packets into the appropriate command in said translation box understood by the application.

19. (Amended) A system for communicating between an application source located on a first side of a firewall and a network element located on a second side of the firewall, comprising:

means provided in the application source for building an HTTP-[SOAP] data envelope of a user request;

a web server provided on the first side of the firewall for receiving said HTTP-[SOAP] data envelope;

a read/write server provided on the second side of the firewall receiving said HTTP-[SOAP] data envelope from said web server;

a [network management application (NMA)] server provided on the second side of the firewall receiving said HTTP-[SOAP] data envelope and building an appropriate nodal model of said user request; and

a translator box provided on the second side of the firewall, said translator box receiving said HTTP-[SOAP] data envelope and translating said HTTP-[SOAP] data envelope into a command for the network element.

20. (Amended) The system in accordance with claim 19, further including a network element agent (NEA) provided on the second side of the firewall for parsing said HTTP-[SOAP] data envelope received from said [NMA] server provided on the second side of the firewall and sending the parsed HTTP-[SOAP] data envelope to said translator box.

21. The system in accordance with claim 19 when said translator box includes a protocol virtual machine (PVM) for understanding object access protocol.

22. The system in accordance with claim 20 when said translator box includes a protocol virtual machine (PVM) for understanding object access protocol.

23. (Amended) The system in accordance with claim 20, further including a network element discovery network (NED) for receiving said HTTP-SOAP envelope from said [NMA] server provided on the second side of the firewall, said HTTP-[SOAP] data envelope including network configuration data.

24. The system in accordance with claim 23, wherein said network configuration data includes port, card, slot and shelf information for a network element.

25. (Amended) The system in accordance with claim 19, wherein said translator box translates said HTTP-[SOAP] data envelope into a command understood by the network element.

26. (Amended) A system for communicating between an application source located on a first side of a firewall and an application located on a second side of the firewall, comprising:

means provided in the application source for building an HTTP-[SOAP] data envelope of a user request;

a web server provided on the first side of the firewall for receiving said HTTP-[SOAP] data envelope;

a read/write server provided on the second side of the firewall receiving said HTTP-[SOAP] data envelope from said web server;

a [network management application (NMA)] server provided on the second side of the firewall receiving said HTTP-[SOAP] data envelope and building an appropriate nodal model of said user request; and

a translator box provided on the second side of the firewall, said translator box receiving said HTTP-[SOAP] data envelope and translating said HTTP-[SOAP] data envelope into a command for the application.

27. (Amended) The system in accordance with claim 26, further including a network element agent (NEA) provided on the second side of the firewall for parsing said HTTP-[SOAP] data envelope received from said NMA at sending the parsed HTTP-[SOAP] data envelope to said translator box.

28. The system in accordance with claim 26 wherein said translator box induces a protocol virtual machine (PVM) for understanding object access protocol.

29. The system in accordance with claim 27 wherein said translator box induces a protocol virtual machine (PVM) for understanding object access protocol.

30. (Amended) The system in accordance with claim 26, wherein said translator box translates said HTTP-[SOAP] data envelope into a command understood by the application.

31. (Amended) A method for communicating between an application source and a network element, comprising the steps of:

providing the application source with an applet to drive a user request, said applet provided by a web server;

sending said user request to a read/write server;

creating a hypertext transfer protocol- data [simple object access protocol (HTTP-SOAP)] (HTTP-data) of said user request;

transmitting said HTTP-[SOAP] data to a second [network management application (NMA)] server;

building an appropriate nodal model of said user request in said [NMA] second server;

38. (Amended) The method in accordance with claim 31 for communicating with a plurality of network elements, further including the steps of:

including a plurality of NEAs, each of said NEAs controlling at least one of the network elements; and

transmitting said [SOAP] data encoded requests to the proper NEA.

39. (Amended) The method in accordance with claim 38, further including the steps of:

including a plurality of translator boxes, each of said translator boxes controlling at least one of the network elements; and

transmitting said [SOAP] data packets to the proper network element.

40. (Amended) The method in accordance with claim 41, further including the step of translating said [SOAP] data packet into an appropriate command in said translator box understood by the network element.

41. (Amended) A method for communicating between an application source and an application, comprising the steps of:

providing the application source with an applet to drive a user request;

sending said user request to a read/write server;

creating a hypertext transfer protocol- data [simple object access protocol (HTTP-SOAP)] (HTTP-data) of said user request;

transmitting said HTTP-SOAP to [network management application (NMA)] a second server;

building an appropriate nodal model of said user request in said [NMA] second server;

sending [SOAP] data encoded requests from said [NMA] second server to a network element agent (NEA);

parsing said [SOAP] data encoded requests received by said [NMA] second server in said NEA which encompasses data needed to complete a single nodal transaction;

encoding in said NEA, [SOAP] data packets;

transmitting said [SOAP] data packets to a translator box associated with the application;

translating said [SOAP packet] data packets into the appropriate command for the application; and

transmitting said command to the application.

42. The method in accordance with claim 41, further including the step of providing said web server at a localized location with respect to said web browser.

43. (Amended) The method in accordance with claim 41, further including the step of modifying said user request prior to sending said request to said [NMA] second server.

44. The method in accordance with claim 41, further including the step of transmitting said user request to a database for storage.

45. The method in accordance with claim 43, further including the step of transmitting said user request to a database for storage.

46. (Amended) The method in accordance with claim 41, for communicating with a plurality of applications, further including the steps of:

including a plurality of NEAs, each of said NEAs controlling at least one of the applications; and

transmitting said [SOAP] data encoded requests to the proper NEA.

47. (Amended) The method in accordance with claim 46, further including the steps of:

including a plurality of translator boxes, each of said translator boxes controlling at least one of the applications; and

transmitting said [SOAP] data packets to the proper applications.

48. (Amended) The method in accordance with claim 41, further including the step of translating said [SOAP packet] data packets into an appropriate command in said translator box understood by the application.

49. (Amended) A system for communicating between an application source and a network element, comprising:

means provided in the application source for building an HTTP-[SOAP] data envelope of a user request;

a web server for receiving said HTTP-[SOAP] data envelope;

a read/write server receiving said HTTP-[SOAP] data envelope from said web server;

a [network management application (NMA)] second server receiving said HTTP-[SOAP] data envelope and building an appropriate nodal model of said user request; and

a translator box, said translator box receiving said HTTP-[SOAP] data envelope and translating said HTTP-[SOAP] data envelope into a command for the network element.

50. (Amended) The system in accordance with claim 48, further including a network element agent (NEA) for parsing said HTTP-[SOAP] data envelope received from said [NMA] second server and sending the parsed HTTP-[SOAP] data envelope to said translator box.

51. The system in accordance with claim 48 when said translator box induces a protocol virtual machine (PVM) for understanding object access protocol.

52. The system in accordance with claim 49 when said translator box induces a protocol virtual machine (PVM) for understanding object access protocol.

sending [SOAP] data encoded requests from said [NMA] second server to a network element agent (NEA);

parsing said [SOAP] data encoded requests received by said [NMA] second server in said NEA which encompasses data needed to complete a single nodal transaction;

encoding in said NEA, [SOAP] data packets;

transmitting said [SOAP] data packets to a translator box associated with the network element;

translating said [SOAP] data packet into the appropriate command for the network element; and

transmitting said command to the network element.

32. The method in accordance with claim 31, further including the step of providing said web server at a localized location with respect to the application source.

33. (Amended) The method in accordance with claim 31 further including the step of transmitting in a [SOAP] data encoded request a network element configuration data from said [NMA] second server to a network element discovery network (NED).

34. The method in accordance with claim 33, wherein said network configuration data comprises port, card, slot and shelf information.

35. (Amended) The method in accordance with claim 31, further including the step of modifying said user request prior to sending said request to said [NMA] second server.

36. The method in accordance with claim 31, further including the step of transmitting said user request to a database for storage.

37. The method in accordance with claim 35, further including the step of transmitting said user request to a database for storage.

53. (Amended) The system in accordance with claim 49, further including a network element discovery network (NED) for receiving said HTTP-[SOAP] data envelope from said [NMA] second server, said HTTP-[SOAP] data envelope including network configuration data.

54. The system in accordance with claim 12, wherein said network configuration data includes port, card, slot and shelf information for a network element.

55. (Amended) The system in accordance with claim 47, wherein said translator box translates said HTTP-[SOAP] data envelope into an appropriate command understood by the network element.

56. (Amended) A system for communicating between an application source and an application, comprising:

means provided in the application source for building an HTTP-[SOAP] data envelope of a user request;

a web server for receiving said HTTP-[SOAP] data envelope;

a read/write server receiving said HTTP-[SOAP] data envelope from said web server;

a [network management application (NMA)] second server receiving said HTTP-[SOAP] data envelope and building an appropriate nodal model of said user request; and

a translator box said translator box receiving said HTTP-[SOAP] data envelope and translating said HTTP-[SOAP] data envelope into a command for the application.

57. (Amended) The system in accordance with claim 56, further including a network element agent (NEA) for parsing said HTTP-[SOAP] data envelope received from said [NMA] second server at sending the parsed HTTP-[SOAP] data envelope to said translator box.

58. The system in accordance with claim 56 wherein said translator box induces a protocol virtual machine (PVM) for understanding object access protocol.

59. The system in accordance with claim 57 wherein said translator box induces a protocol virtual machine (PVM) for understanding object access protocol.

60. (Amended) The system in accordance with claim 56, wherein said translator box translates said HTTP-[SOAP] data envelope into a command understood by the application.

61. (Amended) The method in accordance with claim 1, further including the step of translating in said translator box an appropriate command from the network element into a [SOAP] data packet.

62. (Amended) The method in accordance with claim 11, further including the step of translating in said translator box an appropriate command from the application into a [SOAP] data packet.

63. (Amended) The system in accordance with claim 19, wherein said translator box receives an appropriate command from the network element for translation into a HTTP-[SOAP] data envelope.

64. (Amended) The system in accordance with claim 26, wherein said translator box receives an appropriate command from the application for translation into a HTTP-[SOAP] data envelope.

65. (Amended) The method in accordance with claim 31, further including the step of translating in said translator box an appropriate command from the network element into a [SOAP] data packet.

66. (Amended) The method in accordance with claim 41, further including the step of translating in said translator box an appropriate command from the application into a [SOAP] data packet.

67. (Amended) The system in accordance with claim 49, wherein said translator box receives an appropriate command from the network element for translation into a HTTP-[SOAP] data envelope.

68. (Amended) The system in accordance with claim 56, wherein said translator box receives an appropriate command from the application for translation into a HTTP-[SOAP] data envelope.

69. A method for communicating between an application source and a network element comprising the steps of:

providing the application source with an applet to drive a user request, said applet provided by a web server;

transmitting said user request to a translator box associated with the network element, said translator box including a simple object access protocol (SOAP) server;

creating a HTTP-SOAP packet of said user request in said translator box;

translating said SOAP packet into the appropriate command for the network element; and

transmitting said commercial to the network element.

70. The method in accordance with claim 69, further including the step of including a protocol virtual machine in said translator box for translating a native command generated by said network element into a HTTP-SOAP packet.

71. The method in accordance with claim 69, further including the step of providing a firewall between said web server and said translator box.

72. A method for communicating between first and second application sources, comprising the steps of:

providing the first application source with an applet to drive a user request, said applet provided by a web server;

transmitting said user request to a translator box associated with the second application source, said translator box including a simple object access protocol (SOAP) server;

creating a HTTP-SOAP packet of said user request in said translator box;

translating said SOAP packet into the appropriate command for the second application source; and

translating said command to the second application.

73. The method in accordance with claim 72, further including the step of including a protocol virtual machine in said translator box for translating a native command generated by the second application into a HTTP-SOAP packet.

74. The method in accordance with claim 72, further including the step of providing a firewall between said web server and said translator box.

75. A system for communicating between an application source and a network element, comprising:

a web server for providing the application source with an applet for driving a user request; and

a translator box including a simple object access protocol (SOAP) server, said translator box including means for creating a HTTP-SOAP packet of said user device and means for translating said SOAP packet into the appropriate command for the network element.